

CLAIMS

We claim:

1. A system for anticipating driving conditions, comprising:
 - at least one device supported on a first vehicle that generates a signal indicative of a driving condition at a location of the first vehicle;
 - a receiver that receives the driving condition signal; and
 - a controller supported on a second vehicle that communicates with the receiver and controls at least one device on the second vehicle responsive to the driving condition signal to anticipate the driving condition at the location before the second vehicle reaches the location of the condition.
2. The system of claim 1, wherein the receiver is located remotely from the first and second vehicles.
3. The system of claim 2, wherein the receiver processes signals received from a plurality of first vehicles and provides information to a plurality of second vehicles.
4. The system of claim 1, including a driver interface supported on the second vehicle and wherein the controller controls the driver interface to provide an indication of the driving condition to the driver of the second vehicle before the second vehicle reaches the location.
5. The system of claim 4, wherein the driver interface includes a display that provides a visual indication of the condition to the driver and provides a visual display of suggested action in anticipation of encountering the condition.
6. The system of claim 1, including at least one dynamically adjustable suspension component and wherein the controller controls the component to adjust a performance of the component as the second vehicle approaches the location to adapt a response of the vehicle to the driving condition.
7. The system of claim 1, wherein the device on the first vehicle comprises an accelerometer that provides an indication of a road surface condition.

8. The system of claim 1, including at least one device supported on the second vehicle that generates a signal indicative of a driving condition at a location of the second vehicle, and a controller supported on the first vehicle that communicates with the receiver and controls at least one device on the first vehicle responsive to the driving condition signal to anticipate the driving condition at the location before the first vehicle reaches the location of the condition.

9. The system of claim 1, including a first positioning device supported on the first vehicle and a second positioning device supported on the second vehicle so that at least one of the receiver or the controller makes a determination of the location of the driving condition and the controller controls the device on the second vehicle prior to the second vehicle reaching the location of the driving condition.

10. The system of claim 1, including at least one sensor device that indicates a condition of a selected component on the first vehicle and wherein the controller determines when the selected component may require attention and provides an indication to a vehicle operator.

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11. An intervehicle communication system, comprising:

at least one device supported on a first vehicle that generates a signal indicative of a driving condition at a location of the first vehicle;

a transmitter associated with the signal generating device on the first vehicle that transmits the driving condition signal;

a receiver located remotely from the first vehicle that receives the driving condition signal; and

a controller supported on the first vehicle that communicates with the receiver and controls at least one device on the first vehicle responsive to a driving condition signal received by the receiver from a second vehicle located remotely from the first vehicle to anticipate the driving condition at the remote location before the first vehicle reaches the remote location of the condition.

12. The system of claim 11, including at least one device supported on the second vehicle that generates a signal indicative of a driving condition at a location of the second vehicle;

a transmitter associated with the signal generating device on the second vehicle that transmits the driving condition signal; and

a controller supported on the second vehicle that communicates with the receiver and controls at least one device on the second vehicle responsive to a driving condition signal received by the receiver from the first vehicle to anticipate the driving condition at the remote location before the second vehicle reaches the remote location of the condition.

13. The system of claim 11, wherein the device on the first vehicle that is controlled by the controller includes a driver interface having a display that provides a visual indication to the driver of the driving condition as the first vehicle approaches the location of the driving condition.

14. The system of claim 11, wherein the device on the first vehicle that is controlled by the controller includes a dynamically adjustable suspension component having at least one performance characteristic that is adjustable as the first vehicle approaches the location of the driving condition to provide a controlled response to the driving condition.

15. The system of claim 11, including at least one sensor device that indicates a condition of a selected component on the first vehicle and wherein the controller determines when the selected component may require attention and provides an indication to a vehicle operator.

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16. A method of anticipating a driving condition that will be encountered by a vehicle, comprising the steps of:

- (A) determining a driving condition at a location of a first vehicle;
- (B) communicating information regarding the driving condition from the first vehicle to a second vehicle;
- (C) automatically controlling at least one device on the second vehicle responsive to the driving condition information before the second vehicle encounters the driving condition.

17. The method of claim 16, wherein the second vehicle includes a dynamically adjustable suspension component and step (C) includes automatically adjusting a performance characteristic of the suspension component as the second vehicle approaches the location of the driving condition such that the device responds to the driving condition in a desired manner.

18. The method of claim 16, wherein the second vehicle includes a driver interface that has a display and step (C) includes automatically providing a visual indication of the condition and a suggested driver action on the display as the second vehicle approaches the location of the driving condition.

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